

REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

PENDING CLAIMS

Claims 1-14 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is presently interested. At entry of this paper, Claims 1-14 will be pending for further consideration and examination in the application.

REJECTION UNDER '112, 2ND PAR. OBVIATED VIA CLAIM AMENDMENT

Claims 1 and 4 have been rejected under 35 USC '112, second paragraph, as being indefinite for the concerns listed within the section numbered "3" on page 2 of the Office Action. Such claims have been carefully reviewed and carefully amended where appropriate in order to address the Office Action listed concerns. As the foregoing is believed to have addressed all '112 second paragraph concerns,

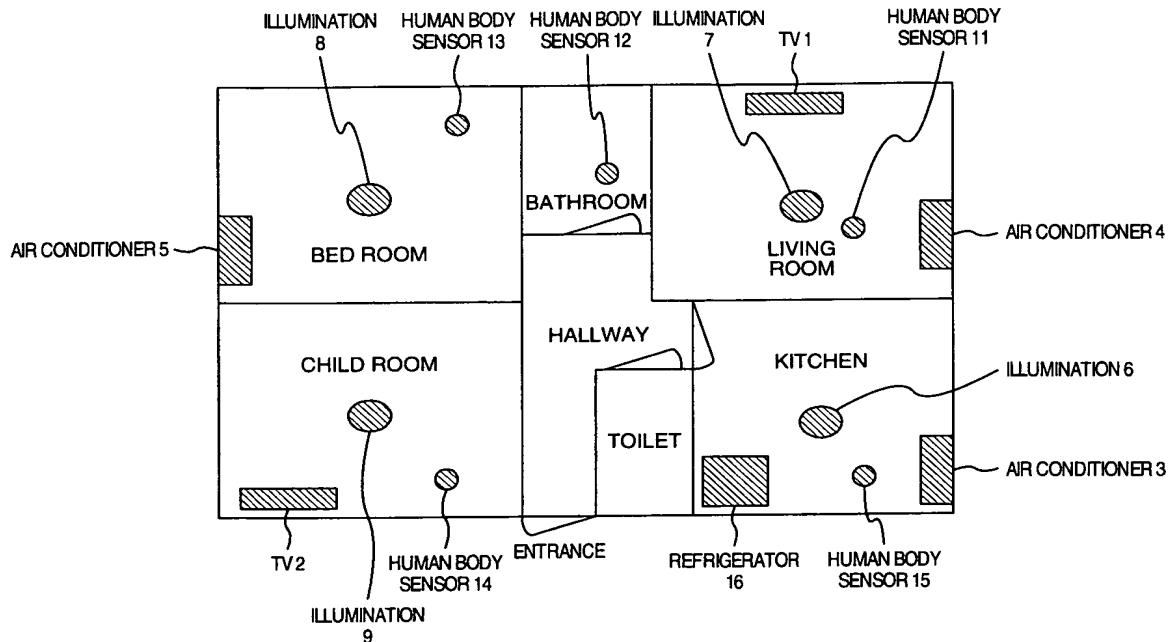
reconsideration and withdrawal of the '112 second paragraph rejection are respectfully requested.

REJECTION UNDER 35 USC '103

The 35 USC '103 rejection of claims 1-14 as being unpatentable over Parl et al. (U.S. Patent 6,259,404) in view of Bertrand et al. (U.S. Patent 5,552,989) is respectfully traversed. All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

Applicant's disclosed and claimed invention is directed toward arrangements (e.g., methods, systems, etc.) which allow the installation positions of appliances (e.g., TVs, air conditioning units, lighting units) within a real-estate unit (e.g., a house, business, etc.) to be determined post-installation without the necessity of having to define the appliance's installation location at the time of installation. More particularly, Applicant's example FIG. 2 is reproduced herewith:

FIG.2



As an illustrative example, all of the TVs, air conditioners, lighting units, etc. appliances may be installed at unknown positions throughout the living room, kitchen, bedroom, child room, etc. As a human moves from room-to-room in the household over time, and interacts with the sensors and appliances to cause state changes (e.g., on/off change, volume level change, temperature setting change, etc.) therein, Applicant's invention calculates occurrence time differences from occurrence times when the state changes have been detected as having occurred by differing ones of the appliances, and then calculates relational distances between appliances which incur the state changes, based on the calculated occurrence time difference.

For example, if the sensor 11 detects a human enters the living room, and the human then turns on lighting unit 7, adjusts the temperature of the air conditioner 4, and turns on the TV1, the changes in states of such appliances over time may be

used to calculate the time differences and ultimately the relational distances between the household appliances. Eventually, if enough human interactions occur over time across the entire household, data such as Applicant's example FIG 13 (reproduced herewith) may be compiled, which data may contain indicators (e.g., calculated numerical values) indicative of relational distances between the household appliances.

FIG.13

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| | APPLIANCE ADDRESS OF TV1 | APPLIANCE ADDRESS OF TV2 | APPLIANCE ADDRESS OF AIR CONDITIONER 3 | APPLIANCE ADDRESS OF AIR CONDITIONER 4 | APPLIANCE ADDRESS OF AIR CONDITIONER 5 | APPLIANCE ADDRESS OF ILLUMINATION 6 | APPLIANCE ADDRESS OF ILLUMINATION 7 | APPLIANCE ADDRESS OF ILLUMINATION 8 | ... | APPLIANCE ADDRESS OF REFRIGERATOR 16 |
|---|-----------------------------|-----------------------------|---|---|---|--|--|--|-----|---|
| APPLIANCE ADDRESS OF TV 1 | | 0.01 | 0.005 | 0.5 | 0.001 | 0.1 | 0.6 | 0.015 | ... | 0.001 |
| APPLIANCE ADDRESS OF TV 2 | 0.01 | | 0.01 | 0.01 | 0.01 | 0.01 | 0 | 0.01 | ... | 0 |
| APPLIANCE ADDRESS OF AIR CONDITIONER 3 | 0.005 | 0.01 | | 0.01 | 0.01 | 0.6 | 0.001 | 0 | ... | 0.4 |
| APPLIANCE ADDRESS OF AIR CONDITIONER 4 | 0.5 | 0.01 | 0.01 | | 0 | 0.1 | 0.5 | 0.06 | ... | 0.01 |
| APPLIANCE ADDRESS OF AIR CONDITIONER 5 | 0.001 | 0.01 | 0.01 | 0 | | 0.01 | 0.01 | 0.4 | ... | 0 |
| APPLIANCE ADDRESS OF ILLUMINATION 6 | 0.1 | 0.01 | 0.6 | 0.1 | 0.01 | | 0.001 | 0.01 | ... | 0.5 |
| APPLIANCE ADDRESS OF ILLUMINATION 7 | 0.6 | 0 | 0.001 | 0.5 | 0.01 | 0.001 | | 0.001 | ... | 0.01 |
| APPLIANCE ADDRESS OF ILLUMINATION 8 | 0.015 | 0.01 | 0 | 0.06 | 0.4 | 0.01 | 0.001 | | ... | 0.01 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| APPLIANCE ADDRESS OF REFRIGERATOR 16 | 0.001 | 0 | 0.4 | 0.01 | 0 | 0.5 | 0.01 | 0.01 | ... | |

The example numerical values which are bounded by example bolded boxes indicate relatively higher values which (in this example) is an indication of appliances which are relatively close to one another (e.g., in a same room as one another).

In terms of distinguishing claim limitations, at minimum, Applicant's independent claim 1's **"(b) calculating an occurrence time difference from**

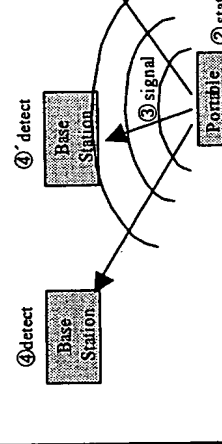
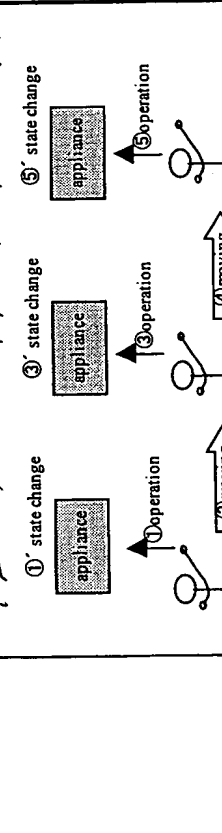
occurrence times when the state changes have been detected as having occurred by differing ones of the appliances, in accordance with occurrence time information indicative of occurrence times of the state changes included in the state information; and (c) **acquiring distance between appliances which incur the state changes, based on the calculated occurrence time difference**.” Other ones of Applicant’s claims contain similar or analogous features/limitations. Claims 8-14 are further limited to the environment within a “household”, and to “household appliances”.

In short, in Applicant’s invention, the installed position of appliances is discriminated by using state-change information from the appliances.

Turning now to rebuttal of the applied art, Parl et al. appears directed to determining the **position of a cell phone between base stations**. As an immediate deficiency, it is noted that only Parl et al.’s cell phone may be validly characterized as an “appliance”, i.e., Parl et al.’s base stations are not properly characterized as “appliances” (they are “base stations”). As another deficiency, **the Examiner has repeatedly admitted (and Applicant concurs) that Parl et al. does NOT teach: “(c). acquiring distance between appliances which incur the state changes based on the calculated occurrence time difference.”**

As further description of Parl et al. and the differences thereof from Applicant’s invention, the following sketch (from Applicant’s foreign representative) is respectfully submitted:

The present invention is different from Parl in the following points

| | Present invention | Parl |
|--------------------------------|--|--|
| | <p>①' ③' ⑤'; In consideration of occurrence times and occurrence time differences for these appliances, positional relation between the appliances are presumed, which is a purpose of the present invention.</p>  | <p>④' ④'; In consideration of occurrence times and occurrence time differences for these base stations, position of a portable unit is presumed.</p>  |
| object of positional detection | <p>Appliances (Distance between appliances is detected as to close or far distance)</p> | <p>Object is not these base stations but the portable unit (Position of human is detected)</p> |
| Assumption | <p>Positions of appliances are unknown.</p> | <p>Positions of the base stations are known in advance</p> |
| Assumption | <p>Human do not have any devices.</p> | <p>Human has a portable unit.</p> |
| Calculation manner | <p>①' ③' ⑤'; In consideration of occurrence times and occurrence time differences for these appliances, distance between the appliances is detected as to close or far distance.</p> | <p>④' ④' ④'; On the basis of time differences between these base stations, calculation is carried out which base station is close to the portable unit.</p> |

Turning now to rebuttal of the secondary reference, Bertrand appears directed to a portable digital map reader for displaying digital geographical maps. While Office Action comments allege that Parl et al. and Bertrand are directed to analogous arts, Applicant respectfully traverses, citing that Parl et al. is directed to the cellphone system art, while Bertrand is directed to the portable digital map reader art.

Regarding combination of the teaching of Parl et al. and Bertrand, it is respectfully submitted that the only logical combination that the references themselves would suggest, would be to have an arrangement where Parl et al.'s embodiment calculates a position of a cell phone relative to base stations, and where the calculated position is simply displayed on Bertrand's portable digital map device.

Regarding Applicant's calculation of relational distances between appliances, it is respectfully submitted that both references are deficient in such regards. More particularly, as mentioned previously, the Examiner has admitted of Parl et al.'s deficiency. Regarding Bertrand, Office Action comments point to Bertrand's "abstract, fig. 3, col. 3, line 16 to col. 4 line 49", for apparent teaching regarding calculating "distances". However, review of such pointed-to parts of Bertrand reveals that Bertrand has extremely minimal teachings regarding "distance", and when it does have teachings, it concerns distances to key landmarks (e.g., hotels). More particularly, Bertrand's column 4, lines 48-49, state, for example: "list two-star hotels situated within 10 minutes' walking distance." In short, Bertrand fails because

Bertrand is NOT teaching distances BETWEEN APPLIANCES, but instead is teaching a distance to a nearby location of interest.

In view of the Office Action's use of non-analogous references, and the improper characterization of Bertrand's "distance" teachings, it is respectfully submitted that the present rejection is nothing more than an improper attempt at hindsight reconstruction.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejection, and express written allowance of all of the '103 rejected claims, are respectfully requested. Further, at this point, it is respectfully submitted as a reminder that, if new art is now cited against any of Applicant's unamended claims, then it would not be proper to make a next action final.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present

application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.40994X00) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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A handwritten signature in cursive script, appearing to read "Paul J. Skwierawski".

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